



WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

Hanford Basics:

- ? The United States Department of Energy is the owner of the Hanford Nuclear Waste Site and responsible for cleanup
- ? 53 million gallons of tank waste
- ? 215 million curies of high-level radioactive waste (the radioactivity released at Chernobyl was 100 million curies)
- ? 177 aging and failing underground storage tanks
- ? 149 underground tanks that are 30 years past their design life
- ? 67 tanks have leaked at least one million gallons of waste into the soil
- ? Contaminants from storage tanks have reached groundwater and are migrating toward the Columbia River
- ? The cost of building the treatment complex will be at least three billion dollars
- ? Ecology and the EPA are the regulatory agencies for the site

River at Risk . . . The Columbia

**Washington State
Department of Ecology
1315 West Fourth Avenue
Kennewick, Washington 99336
Telephone: (509) 735-7581**

**Hanford Hotline: (800) 321-2008
Web Site: [http://www.wa.gov/
ecology/nwp](http://www.wa.gov/ecology/nwp)**

TIME IS RUNNING OUT FOR THE COLUMBIA RIVER

Action Is Needed *NOW* To Prevent a River Disaster

THE THREAT

There are 177 aging and corroding underground tanks, that contain high-level radioactive hazardous nuclear waste, on the Hanford Site. Sixty-seven of those have already leaked more than one million gallons of waste into the soil and groundwater. More tanks will fail at Hanford; more waste will reach groundwater and begin moving toward the Columbia River. Risks to the environment and the people of the Pacific Northwest will skyrocket as more and more waste seeps into the groundwater. Cleanup costs will continue to soar.

THE SOLUTION

The only real solution to this environmental threat is to retrieve the waste from the tanks and treat it. The preferred alternative treatment of this waste is to immobilize it in glass (vitrification) before more waste leaks into the environment.

The Washington State Department of Ecology supports the vitrification of Hanford tank waste; it is a technically sound and viable approach.

Although Hanford has 60% of all the United States Department of Energy high-level radioactive tank wastes, it is the *only* site without waste treatment capability. Efforts to secure the necessary facilities have seen repeated false starts and delays over the past ten years. The most recent setback was the failed privatization approach to contracting.

Further delay is unacceptable; the consequences are too great. If an environmental crisis is to be avoided, action must be taken quickly.

It will take at least seven years to design and build the very large and intricate treatment complex needed to glassify the tank waste. It will then take another 20-50 years to retrieve and glassify all the waste from these 177 failing tanks.

The money needed to build the treatment complex is several billion dollars, and a billion dollars will be needed each year to build retrieval systems and run the treatment complex.

The long timeline and enormous amount of money needed, both lead to the *crisis of commitment* we are experiencing now. For the sake of the Pacific Northwest, the federal government (Congress and the United States Department of Energy) must move beyond this crisis and commit to building a treatment complex at Hanford.

Ecology is seeking enforceable commitments that will hold the United States Department of Energy accountable, and ensure swift action to protect the environment, human health and the Columbia River.

SUCCESS IS POSSIBLE

The science of vitrification is mature and, from an engineering perspective, it will immobilize the waste. *Success is possible*, but it will require *commitment*.

- ? *Commitment* — from the United States Department of Energy to define a path forward and stick to it without more delays or false starts
- ? *Commitment* — from Congress to fund the project
- ? *Commitment* — from the state of Washington to force accountability
- ? *Commitment* — from the region to say . . . “A treatment complex must be built . . . The waste must not be left in the tanks to leak to groundwater and threaten the Columbia River.”

CONSTRUCTION OF A TREATMENT COMPLEX MUST BE STARTED NOW!